

## CLAIMS

What is claimed is:

- 5      1. A process for network data flow control comprising:  
              controlling a network connecting device of at least two connecting ports  
              directly from a network management server in order to achieve data flow control of  
              each terminal user and each service.
  
- 10     2. The process of Claim 1, further comprising the steps of:
  - (a) establishing a protocol between a network management server and a  
              network connecting device of at least two connecting ports;
  - (b) reporting the network connecting device's running condition to the  
              network management server by the protocol in (a);
  - 15     (c) determining by the network management server whether a user's service  
              request can be accepted;
  - (d) notifying a service process to the connecting port;
  - (e) identifying service type;
  - (f) counting data flow of each service process; and
  - 20     (g) dropping extra data if one service process data flow exceeds a requested  
              capacity.
  
- 25     3. The process of claim 2 wherein more than one network management server  
              can manage a network corporately these network management servers are separated  
              into groups by their position in the network or the service they provide or both.
  
- 30     4. The process of Claim 3 wherein the net connecting device receives an Ethernet  
              data packet and will identify the flag to see which service process the packet belongs,  
              check the related counters, confirm the length of the packet, and then judge if the data  
              rate exceeds its limit, if it does, it will be dropped, otherwise re-calculate the counters  
              and forward the packet.
  
5.      The process of claim 4 wherein the network management server is a computer.

6. The process of claim 5 further comprising a terminal user which is a device that can send and receive Ethernet data packets.
7. The process of claim 6 wherein the service is selected from the group consisting of a video service, audio service, text service, unicast service and multicast service.
8. The process of Claim 4 wherein the data rate of each service is user defined.